

**FY 1998**

**ENERGY AND WATER APPROPRIATIONS - House Report 105-190**

**Independent Assessment of DOE Construction Projects and Project Management Systems --** The Department's track record for managing construction projects is not as successful as it could be. The General Accounting Office (GAO) believes that the high rate of cost overruns, schedule slippages, and terminations on major systems acquisitions can be traced to four key factors: constantly changing missions; incremental funding of projects; a flawed system of incentives that has often rewarded contractors despite poor performance; and difficulty in hiring, training, and retaining people with the requisite skills to provide effective oversight and management of contractor operations. The Committee also believes there is a lack of internal, independent oversight of projects at the Department. Projects are proposed by contractors and strongly defended by Federal employees who take on the role of program and project advocate rather than impartial overseer. There does not appear to be a strong independent assessment of projects within the internal Departmental system.

Thus, the Committee has directed the Corps of Engineers to review all Departmental construction projects funded in fiscal year 1998. The Committee has further directed that no funds be obligated for any new fiscal year 1998 construction projects until the cost, schedule, scope, and supporting data for each construction project has been validated by an independent assessment of the Corps of Engineers. The Committee will work with the Department and the Corps to prioritize the order in which the projects should be reviewed.

**Independent Assessment of DOE Projects --** As noted in the introduction to Title III, the Committee has serious concerns about the Department's ability to manage construction projects and is equally concerned that there is a lack of strong internal, independent oversight of projects at the Department. The Committee has directed the Corps of Engineers to review all Departmental construction projects funded in fiscal year 1998. The Corps will review and assess the quality of the technical scopes, cost estimates, schedules, and supporting data, and make recommendations on the validity of the proposed scopes, costs, and schedules. If DOE's proposed approach is unreasonable, unjustified, or not integrated into the overall program activities, the Corps will recommend alternatives. Recommendations will be focused on those projects upon which net savings can be made. The Committee has included statutory language providing that no funds be obligated for any new fiscal year 1998 construction projects until the cost, schedule, and scope of each construction project has been validated by an independent assessment of the Corps of Engineers.

The Committee believes that the root cause of the Department's failure to manage projects is the lack of qualified Federal personnel to manage the contracts and the lack of internal project management systems supporting this critical contract oversight. As such, the Committee has provided funding for an independent assessment of the Department of Energy's project management systems and facility acquisition management processes by the Corps of Engineers working with private industry, if appropriate, and the National

Academy of Engineering. The evaluation should focus on the process and management structure that DOE uses to identify and meet the identified requirements of the users of the proposed facilities, and ultimately, deliver the facilities meeting these needs as cost effectively and timely as possible.

The Committee has also provided funding to the Corps of Engineers to complete the environmental management site assessments which were initiated in fiscal year 1997 at the request of the Department. The Committee expects the Corps to not just make recommendations for cost savings, but also to report back to the Committee on the success with which the Department is implementing these recommendations.

The Committee recommendation includes \$35,000,000 to be provided to the Corps of Engineers for this independent review of the Department's construction projects and project management system.

## **ENERGY AND WATER APPROPRIATIONS - Conference Report 105-271**

**Independent Assessment of DOE Projects** –The conference agreement provides \$35,000,000 as proposed by the House to provide for external reviews of the Department's individual construction and privatization projects, and an external review of the Department's facility acquisition management process. The immediate concern of the conferees is a review of all Department of Energy construction projects initiated in fiscal year 1998, construction projects currently in the conceptual design phase, ongoing projects if recommended by the initial assessment required below, and projects proposed by the Department for privatization. These evaluations should include a review and assessment of the quality of the technical scopes, cost estimates, schedules, and supporting data regarding these construction projects, and should make recommendations on the validity of the proposed costs, scopes, and schedules.

While the House bill directed that these reviews be conducted by the Corps of Engineers, the conferees acknowledge that there may be other qualified, unbiased external organizations that could conduct this type of assessment. Therefore, prior to obligating any funds provided for review of these construction and privatization projects, the conferees expect the Department to contract with an impartial independent organization with expertise in the evaluation of government management and administrative functions, for a detailed analysis of the proposed independent assessment of construction projects.

This contract should produce a report to be submitted to the House and Senate Committees on Appropriations not later than December 31, 1997. The report should address the need for conducting independent assessments of the Department's proposed and ongoing construction projects and projects proposed for privatization, assess the proposed content of these reviews as outlined above, as well as recommend the appropriate entity(ies) (including, but not limited to, the Corps of Engineers) to conduct these reviews. The conferees expect this contract to be entered into as soon as possible, and expect the Department to consult with the Appropriations Committees regarding the selection of an independent organization to produce this report.

In addition to the report on the need for an independent assessment of the Department's construction projects, the conferees direct that the Department's overall management structure and process for identifying, managing, designing and constructing facilities also be reviewed by an impartial independent organization with expertise in the evaluation of government management and administrative functions. The report should be provided to the Committees on Appropriations by June 30, 1998. The process used by the Department and its contractors to identify project requirements, develop scopes of work, execute and manage design, prepare cost estimates, select contract types, and execute and manage construction must be examined. The review should assess the level of oversight and experience of field and headquarters Federal personnel involved in this process. The recommendations of the report should include an analysis of the effectiveness of this process, advantages, disadvantages, and recommended improvements with the ultimate goal of establishing an overall departmental process that has more control of the projects and reduces project cost growth and schedule slippages. This study should also include a review of large operating projects such as environmental projects which may or may not involve much construction, but should clearly be managed with the same principles and guidelines.

#### **FY 1999**

#### **ENERGY AND WATER APPROPRIATIONS - Conference Report 105-749**

**Construction Projects** -- ...The conference agreement provides a total of \$15,000,000 for new construction projects in fiscal year 1999. The budget request for new construction starts was \$25,300,000. The conferees acknowledge the need for some new construction funding, but remain concerned that the Department has not yet resolved its serious project management deficiencies. Thus, none of the funds may be obligated for a project until an independent assessment validating the cost and schedule for the specific project has been completed and provided to the House and Senate Committees on Appropriations.

#### **FY 2000**

#### **NATIONAL DEFENSE AUTHORIZATION ACT - PL 106-65**

##### **SEC. 3123. Limits On Construction Projects.**

(a) IN GENERAL- (1) Except as provided in paragraph (2), construction on a construction project may not be started or additional obligations incurred in connection with the project above the total estimated cost, whenever the current estimated cost of the construction project, which is authorized by section 3101, 3102, or 3103, or which is in support of national security programs of the Department of Energy and was authorized by any previous Act, exceeds by more than 25 percent the higher of--

- (A) the amount authorized for the project; or
- (B) the amount of the total estimated cost for the project as shown in the most recent budget justification data submitted to Congress.

(2) An action described in paragraph (1) may be taken if--

- (A) the Secretary of Energy has submitted to the congressional defense committees a report on the actions and the circumstances making such action necessary; and
  - (B) a period of 30 days has elapsed after the date on which the report is received by the committees.
- (3) In the computation of the 30-day period under paragraph (2), there shall be excluded any day on which either House of Congress is not in session because of an adjournment of more than 3 days to a day certain.
- (b) EXCEPTION- Subsection (a) shall not apply to any construction project which has a current estimated cost of less than \$5,000,000.

**SEC. 3176. Pilot Program for Project Management Oversight Regarding DOE Construction Projects --**

- (a) REQUIREMENT- (1) The Secretary of Energy shall carry out a pilot program on use of project management oversight (PMO) services for Department of Energy construction projects.
- (2) The purpose of the pilot program is to provide a basis for determining whether or not the use of competitively procured, external project management oversight services on construction projects would permit the Department to control excessive costs and schedule delays associated with Department construction projects having large capital costs.
- (b) PROJECTS COVERED BY PROGRAM- (1) Subject to paragraph (2), the Secretary shall carry out the pilot program at construction projects selected by the Secretary. The projects shall include one or more construction projects authorized pursuant to section 3101 and one construction project authorized pursuant to section 3102.
- (2) The Secretary shall select projects that have capital construction costs anticipated to be not less than \$25,000,000.
- (c) SERVICES UNDER PROGRAM- The project management oversight services utilized under the pilot program shall include the following services:
  - (1) Monitoring the overall progress of a project.
  - (2) Determining whether or not a project is on schedule.
  - (3) Determining whether or not a project is within budget.
  - (4) Determining whether or not a project conforms with plans and specifications approved by the Department.
  - (5) Determining whether or not a project is being carried out efficiently and effectively.
  - (6) Any other management oversight services that the Secretary considers appropriate for purposes of the pilot program.
- (d) PROCUREMENT OF SERVICES UNDER PROGRAM- Any services procured under the pilot program shall be acquired--
  - (1) on a competitive basis; and
  - (2) from among commercial entities that--
    - (A) do not currently manage or operate facilities at a location where the pilot program is being conducted; and
    - (B) have an expertise in the management of large construction projects.

(e) REPORT- Not later than February 1, 2000, the Secretary shall submit to the Committees on Armed Services of the Senate and the House of Representatives a report on pilot program. The report shall include the Secretary's assessment of the feasibility and desirability of utilizing project management oversight services for Department of Energy construction projects.

**Pilot program for project management oversight regarding Department of Energy construction projects (sec. 3176)**

The committee recommends a provision that would direct the Secretary of Energy to initiate a project management oversight (PMO) pilot effort in at least one defense programs and one environmental management construction project with a total estimated cost of at least \$25.0 million. The PMO pilot projects would assess the effectiveness of using PMO service providers to help control cost and schedule overruns at large Department of Energy (DOE) construction projects. Such services would include monitoring the project's progress in order to determine if the project is on time, within budget, in conformance with the approved plans and specifications, and being implemented efficiently and effectively. The Secretary would be required to submit a report to the defense committees of Congress on the effectiveness of the pilots not later than September 1, 2000. The Secretary would be required to procure such services on a competitive basis from among those commercial firms who have expertise in managing large construction projects, but who do not currently manage or operate a facility where a pilot would be conducted.

The committee remains concerned that DOE has failed to take appropriate action to control costs in large construction projects at its facilities. The committee notes a finding by the General Accounting Office that, as of April 15, 1999, all fiscal year 1999 new construction starts in the Office of Defense Programs are behind schedule by at least five months. The committee further notes that most large commercial construction projects enlist PMO-type services to act on behalf of the project owners by overseeing day-to-day matters. The committee believes that the DOE, as 'owner' of many large and complex construction projects, could greatly benefit from PMO services.

**ENERGY AND WATER APPROPRIATIONS - Senate Report 106-58**

**Office of Field Management** -- Consistent with the recommendation of the Commission on Maintaining United States Nuclear Weapons Expertise to establish direct reporting chains for the Department's sites, laboratories, and facilities, the Committee recommendation eliminates funding for the Office of Field Management.

**ENERGY AND WATER APPROPRIATIONS - House Report 106-253**

**Spallation Neutron Source** -- The recommendation provides \$67,900,000, including \$17,900,000, the same amount as the budget request, for underlying research and development needed to confirm design for this unique machine and \$50,000,000 for construction, a reduction of \$146,100,000 from the amount requested. The Committee has again recommended a reduction in the funding level for this project based on several unfavorable reviews of the management of this project including reviews by the Department of Energy (DOE), the General Accounting Office (GAO), and the

comprehensive independent review commissioned by the Committee (EG&G). In testimony to the Committee, the Department stated that: 'The only reason for the change in the total project cost is the change in the fiscal year 1999 budget for the project from \$157 million to \$130 million.' Each of the reports cited problems including, for example, the need to reorganize the project office, the need for better lines of responsibility through the lab structure, and the need for project managers with project manager experience. Each of these are significant issues that must be addressed before construction commences. None of these are attributable to the Congress's recognition that this project was not ready for full funding last year. It is unfortunate that the Department chose to first blame Congress when cost estimates were increased.

Despite these problems, the Committee is encouraged that the Department is re-evaluating the costs and proposals submitted by the proposed participating laboratories. The Department has already announced that this project is now on track and that its new management team and project management structure have eliminated all of the problems and concerns of the reports cited above. The Committee has grown accustomed to the Department immediately solving all problems with the issuance of a press release; however, the Committee is holding onto its confetti.

The Committee will continue to closely follow the progress of this project and urges the Department to follow through on its stated commitment to put the goals and interests of this taxpayer-funded project above the goals and interests of the individual labs that ultimately participate in this project. Consistent with the authorization bill recently passed by the House Committee on Science, the Department is prohibited from obligating funds provided in this Act until the following are provided to the committees of jurisdiction, namely the Committee on Science of the House, the Committee on Energy and Natural Resources of the Senate, and the Committees on Appropriations of the House and the Senate:

- (1) Certification that senior project management positions for the project have been filled by qualified individuals;
- (2) Cost baseline and project milestones for each major construction and technical system activity, consistent with the overall cost and schedule submitted with the Department's fiscal year 2000 budget, that have been reviewed and certified by an independent entity, outside the Department and having no financial interest in the project, as the most cost-effective way to complete the project;
- (3) Binding legal agreements that specify the duties and obligations of each laboratory of the Department in carrying out the project;
- (4) A revised project management structure that integrates the staff of the collaborating laboratories working on the project under a single project director, who shall have direct supervisory responsibility over the duties and obligations described in subparagraph (3) above,
- (5) Official delegation by the Secretary of primary authority with respect to the project to the project director;
- (6) Certification from the Comptroller General that the total taxes and fees in any manner or form paid by the Federal government on the SNS and the

property, activities, and income of the Department relating to the SNS to the State of Tennessee or its counties, municipalities, or any other subdivision thereof, does not exceed the aggregate taxes and fees for which the Federal government would be liable if the project were located in any other State that contains a national laboratory of the Department; and

(7) Annual reports on the SNS project, included as part of the Department's annual budget submission, including a description of the achievement of milestones, a comparison of actual costs to and any changes in estimated project costs or schedule.

## **ENERGY AND WATER APPROPRIATIONS - House Report 106-253**

**Improving Project Management in DOE --** A report released by the National Research Council on July 1, 1999, 'Improving Project Management in the Department of Energy,' questions the credibility of the Department's procedures to develop designs and cost estimates and to manage projects and outlines several reasons for this deficiency. The report was thorough and includes many recommendations to begin to correct the deficiencies in the Department's project management system. The Committee is well aware there are broad and systemic problems in the Department and encourages the Department to use this report as an outline to address these fundamental problems in project management. **There are no quick fixes. The Committee expects the Department to continue to work with the National Research Council to address each of the recommendations in the report. The National Research Council should review and assess the Department's efforts to improve its project management and report to the Committee semi-annually on the steps to be taken and the progress being made to strengthen project management in the Department.**

At the request of the Committee, the Department has had external, independent project assessments prepared for many of its current construction projects. These assessments have identified several problems with individual projects and have led to the re-scoping of several of them. The Department is to work with the National Research Council to formalize a process to ensure that the recommendations for each of the external independent reviews are implemented.

**External Independent Assessments of Construction Projects --** None of the funds provided for fiscal year 2000 new construction projects may be obligated until an external, independent assessment of the baseline cost and schedule has been performed and provided to the House and Senate Committees on Appropriations for review and approval.

## **ENERGY AND WATER APPROPRIATIONS - Conference Report 106-336**

**External Independent Assessments of Construction Projects --** The conferees agree that none of the funds provided for fiscal year 2000 construction projects may be obligated until an external, independent assessment of the baseline cost and schedule has been performed and provided to the House and Senate Committees on Appropriations for review. The Department is also directed to improve the corrective action plans prepared

in response to these external reviews. The quality of the corrective action plans received by the Committees on Appropriations has been marginal at best.

**Departmental Administration --** The conference agreement appropriates \$206,365,000 for Departmental Administration instead of \$193,769,000 as proposed by the House and \$219,415,000 as proposed by the Senate. Funding of \$10,000,000 is to be transferred to this account from Other Defense Activities. Revenues of \$106,887,000, \$10,000,000 less than the budget request, are estimated to be received in fiscal year 2000, resulting in a net appropriation of \$99,478,000.

The conference agreement provides \$26,000,000 for the Chief Financial Officer, an increase over the budget request of \$23,792,000. These additional funds are to support the new engineering and construction division.

The conference agreement provides \$1,000,000 as proposed by the House for severance payments for the office of field management.

## **NATIONAL DEFENSE AUTHORIZATION ACT FOR FY 00**

### **SEC. 3123. Limits On Construction Projects --**

(a) IN GENERAL- (1) Except as provided in paragraph (2), construction on a construction project may not be started or additional obligations incurred in connection with the project above the total estimated cost, whenever the current estimated cost of the construction project, which is authorized by section 3101, 3102, or 3103, or which is in support of national security programs of the Department of Energy and was authorized by any previous Act, exceeds by more than 25 percent the higher of--

- (A) the amount authorized for the project; or
- (B) the amount of the total estimated cost for the project as shown in the most recent budget justification data submitted to Congress.

(2) An action described in paragraph (1) may be taken if--

- (A) the Secretary of Energy has submitted to the congressional defense committees a report on the actions and the circumstances making such action necessary; and
- (B) a period of 30 days has elapsed after the date on which the report is received by the committees.

(3) In the computation of the 30-day period under paragraph (2), there shall be excluded any day on which either House of Congress is not in session because of an adjournment of more than 3 days to a day certain.

(b) EXCEPTION- Subsection (a) shall not apply to any construction project which has a current estimated cost of less than \$5,000,000.

### **SEC. 3175. Pilot Program for Project Management Oversight Regarding DOE Construction Projects --**

(a) REQUIREMENT- (1) The Secretary of Energy shall carry out a pilot program on use of project management oversight services (in this section referred to as 'PMO services') for construction projects of the Department of Energy.

(2) The purpose of the pilot program shall be to provide a basis for determining whether or not the use of competitively procured, external PMO services for those



construction projects would permit the Department to control excessive costs and schedule delays associated with those construction projects that have large capital costs.

(b) **PROJECTS COVERED BY PROGRAM-** (1) Subject to paragraph (2), the Secretary shall carry out the pilot program at construction projects selected by the Secretary. The projects shall include one or more construction projects authorized pursuant to section 3101 and one construction project authorized pursuant to section 3102.

(2) Each project selected by the Secretary shall be a project having capital construction costs anticipated to be not less than \$25,000,000.

(c) **SERVICES UNDER PROGRAM-** The PMO services used under the pilot program shall include the following services:

(1) Monitoring the overall progress of a project.

(2) Determining whether or not a project is on schedule.

(3) Determining whether or not a project is within budget.

(4) Determining whether or not a project conforms with plans and specifications approved by the Department.

(5) Determining whether or not a project is being carried out efficiently and effectively.

(6) Any other management oversight services that the Secretary considers appropriate for purposes of the pilot program.

(d) **PROCUREMENT OF SERVICES UNDER PROGRAM-** Any PMO services procured under the pilot program shall be acquired--

(1) on a competitive basis; and

(2) from among commercial entities that--

(A) do not currently manage or operate facilities at a location where the pilot program is being conducted; and

(B) have an expertise in the management of large construction projects.

(e) **REPORT-** Not later than February 1, 2000, the Secretary shall submit to the Committees on Armed Services of the Senate and the House of Representatives a report on the pilot program. The report shall include the assessment of the Secretary as to the feasibility and desirability of using PMO services for construction projects of the Department.

## **FY 2001**

### **ENERGY AND WATER APPROPRIATIONS – Senate Report 106-395**

**Preliminary Project Design and Engineering, Various Locations --** The Committee is pleased the Department established (OECM) within (CFO). With the establishment of this office, the Committee expects the Department to strengthen its capabilities in the area of construction management oversight. The committee continues to support the use of (EIRs) for all new line item capital projects, conducted by non-proponent, recognized professional project management firms and managed by OECM. EIRs should be conducted prior to construction and after establishing the final performance baseline, and shall include an independent cost estimate, and required corrective action plans and

updates...The Committee further notes the Department's proposed request for Project Engineering and Design for certain of its projects in the Defense area for fiscal year 2001, and that the purpose is to achieve a 30-35 percent level of engineering design for new construction projects, prior to providing data to the Congress, in support of construction funding. Such an advanced design should provide a more mature technical and cost baseline, ensuring greater likelihood of achieving project cost and schedule adherence. Therefore, the requirement to restrict the availability of funding for new projects, until an EIR has been reviewed by the Committee, can be lifted. OECM is to work with the Committee to establish guidelines to ensure final performance baselines are developed for each new project, that EIRs are undertaken to validate these baselines, and procedures are developed which make the availability of funding contingent upon successful review and approval by OECM.

### **ENERGY AND WATER APPROPRIATIONS – House Report 106-701**

**Project Management** -- The Department has established (OECM) to strengthen its project management capabilities. The committee strongly supports this effort. The Department has also proposed a new budget line item for preliminary project engineering and design (PED) which would be used to achieve a 30 to 35 percent level of design for new construction projects before the projects are submitted to Congress for authorization and appropriations. This should provide a more mature technical and cost baseline and a greater likelihood of achieving the project cost and schedule. As part of the fiscal year 2002 budget request, the Department should submit a PED line item for each program area which anticipates funding new construction projects in future budgets...The Committee will not require that an external independent assessment of the baseline cost and schedule of all fiscal year 2001 construction projects be performed before funds can be obligated. However, the Committee directs the Department to identify and document the process that will be used to determine which projects will require an (EIR) and at which phase of the project the review should be conducted. The report should also identify how the use of PED will be incorporated into construction project development. This report should be provided to the House and Senate Committees on Appropriations by December 31, 2000.

### **ENERGY AND WATER APPROPRIATIONS – Conference Report 106-907**

#### **Statutory Language:**

**Weapons Activities** -- For Department of Energy expenses, including the purchase, construction and acquisition of plant and capital equipment and other incidental expenses necessary for atomic energy defense weapons activities in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including the acquisition or condemnation of any real property or any facility or for plant or facility acquisition, construction, or expansion; and the purchase of passenger motor vehicles (not to exceed 12 for replacement only), \$5,015,186,000, to remain available until expended: Provided: That, \$130,000,000 shall be immediately available for Project 96–D–111, the National Ignition Facility at Lawrence Livermore National Laboratory: Provided further, That \$69,100,000 shall be available only upon a certification by the Administrator of the National Nuclear Security Administration to the Congress after March 31, 2001, that (a) includes a recommendation on an appropriate path forward for

the project; (b) certifies all established project and scientific milestones have been met on schedule and on cost; (c) certifies the first and second quarter project reviews in fiscal year 2001 determined the project to be on schedule and cost; (d) includes a study of requirements for and alternatives to a 192 beam ignition facility for maintaining the safety and reliability of the current nuclear weapons stockpile; (e) certifies an integrated cost-schedule earned-value project control system has been fully implemented; and (f) includes a five-year budget plan for the stockpile stewardship program.

**Conference Report Language:**

**Project Management --** The conferees strongly support the progress being made by the Office of Engineering and Construction Management in bringing standardization, discipline, oversight, and increased professionalism to the Department's project management efforts. The project engineering and design (PED) process developed by the Department represents significant progress toward correcting serious management deficiencies that have historically plagued the Department's construction projects. The conferees believe that implementation of the PED process for all construction and environmental projects throughout the Department will provide the assurance necessary to eliminate the current requirement for an external independent review of all projects prior to releasing funds for construction. The conferees expect the continuation of the external independent review process as discussed in both the House and Senate reports.

**Weapons Activities: Construction projects --** The conference agreement provides \$35,500,000 for preliminary project engineering and design.

**National Ignition Facility --** The conference agreement provides \$199,100,000 for continued construction of the National Ignition Facility (NIF). The conferees have included a directed reduction of \$25,000,000 in the Weapons Activities account which is to be applied to programs under the direction of the Lawrence Livermore National Laboratory. The conferees have included statutory language providing that only \$130,000,000 shall be made available for NIF at the beginning of fiscal year 2001 and the remaining \$69,100,000 shall be available only upon a certification after March 31, 2001, by the Administrator of the National Nuclear Security Administration that several requirements have been met. These requirements include:

A. A recommendation on an appropriate path forward for the project based on a detailed review of alternative construction options that would (1) focus on first achieving operation of a 48 or 96 beam laser; (2) allow for the full demonstration of a such a system in support of the stockpile stewardship program before proceeding with construction and operation of a larger laser complex; and (3) include a program and funding plan for the possible future upgrade to a full NIF configuration. The recommendation should include identification of available "off-ramps" and decision points where the project could be scaled to a smaller system.

B. Certification that project and scientific milestones as established in the revised construction project data sheet for the fourth quarter of fiscal year 2000 and the first two quarters of fiscal year 2001 have been met on schedule and on cost.

C. Certification that the first and second quarter project reviews in fiscal year 2001 determined the project to be on schedule and cost and have provided further validation to the proposed path forward.

D. Completion of a study that includes conclusions as to whether the full-scale NIF is required in order to maintain the safety and reliability of the current nuclear weapons stockpile, and whether alternatives to the NIF could achieve the objective of maintaining the safety and reliability of the current nuclear weapons stockpile.

E. Certification that the NIF project has implemented an integrated cost-schedule earned-value project control system by March 1, 2001.

F. A five-year budget plan for the stockpile stewardship program that fully describes how the NNSA intends to pay for NIF over the out years and what the potential for other impacts on the stockpile stewardship program will be.

The conferees remain concerned about the Department's pro-posed budget increase and schedule delay for the NIF at the Lawrence Livermore National Laboratory (LLNL). The conferees believe that previously the Department of Energy, and most recently the National Nuclear Security Administration (NNSA), may have failed to examine adequately options for NIF that have fewer than the full 192 beams. For example, a preferred course for NIF may be to complete 48 or 96 beams as soon as possible (although block procurement of infrastructure and glass may be considered), bring the reduced NIF into operation, perform the necessary scientific and technical tests to evaluate whether a full NIF will work and its impact on stockpile stewardship, and then develop a path for-ward for NIF that balances its scientific importance within the overall needs of the stockpile stewardship program. To move on this path in fiscal year 2001, the conferees recommend that \$199,100,000 be appropriated for NIF as follows: \$74,100,000 as originally proposed for Project 96-D-111, \$40,000,000 from NIF operations funding within the budget request for LLNL, \$25,000,000 to be identified within the budget request at LLNL, plus an additional \$60,000,000 in new appropriations. Furthermore, the conferees direct the Administration to pre-pare a budget request for fiscal year 2002 that fully reflects a balanced set of programs and investments within the stockpile stewardship program, and that the overall budget profile over the next eight years will accommodate a \$3.4 billion NIF along with the other critical aspects of the program.